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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,839	10/29/2003	Yasushi Hattori	Q78107	2503

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EXAMINER

RICKMAN, HOLLY C

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 07/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/694,839

Applicant(s)

HATTORI ET AL.

Examiner

Holly Rickman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-10 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-10, 13-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. *The finality of the Office action mailed 2/23/05 is withdrawn.* The supplemental amendments under 37 CFR 1.116 filed 5/23/05 has been entered. New grounds of rejection are set forth below.

#### *Claim Objections*

2. The objection to claim 12 is moot in view of the cancellation of the claim.

#### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 5-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The original disclosure fails to provide support for the aforementioned claims which now require a conductive layer containing a conductive polymer and addition elements such as conductive metal oxide or carbon black. The specification describes a conductive layer which contains any one of a conductive polymer, a conductive metal oxide, or carbon black. However,

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there is no indication that applicant had possession of the concept of a particle filled conductive polymer layer (particles being conductive metal oxide, carbon black) at the time of invention..

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2-10,13-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 and all claims depending therefrom are rendered indefinite by the phrase "CuAu type or Cu<sub>3</sub>Au type ferromagnetic ordered phase." The use of the word "type" has been held to render an otherwise definite expression indefinite. In addition, it is noted that CuAu and Cu<sub>3</sub>Au alloys are not ferromagnetic. Thus, it is not clear to the examiner what the metes and bounds of this limitation are. It is suggested that Applicant amend the claims to recite the specific alloys set forth in the specification (see pages 11-12).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. The rejection of claims 1-10, 12, and 14-17 under 35 U.S.C. 103(a) as being unpatentable over Saitoh et al. (U56127039) in view of Murray et al. (U56254662) is withdrawn in view of Applicant's amendments.

9. Claims 2-4 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyake et al. (US 5079096) in view of Kikitsu et al. (US 6602620).

Miyake et al. disclose a magnetic recording medium comprising a magnetic particle containing layer on a nonmagnetic substrate with a layer of conductive polymer therebetween. The magnetic layer contains magnetic particles formed from a material such as Ba ferrite or Fe alloys and has a thickness of 80 nm (col. 11, lines 1-8; col. 11, line 48 to col. 13, line 32; col. 12, line 63 to col. 13, line 4). The reference is silent with respect to the use of CuAu or Cu<sub>3</sub>Au type ferromagnetic ordered phases, wherein a conductive layer is provided on at least one side of the non-magnetic substrate.

Kikitsu et al. disclose a magnetic recording medium having a magnetic recording layer containing magnetic particles selected from a group including Ba ferrite and ordered alloys such as FePt (i.e. CuAu type) (see col. 9, lines 45-62). Kikitsu et al. also teach the desirability of adding a layer on top of the magnetic recording film to serve as a protective layer (see col. 8, lines 57-64).

It would have been obvious to one of ordinary skill in the art at the time of invention to substitute an ordered CuAu type alloy such as FePt for the Ba ferrite particles taught by Miyake et al. in view of the art recognized equivalence of the two materials as shown by Kikitsu et al.

In addition, it would have been obvious to add a protective layer on top of the magnetic recording film taught by Miyake et al. in order to provide protection for the surface of the recording medium as suggested by Kikitsu et al.

Claim 4 requires the conductive layer to be formed on an "edge" of a substrate. In the absence of a clear definition in the specification, the examiner has interpreted "edge" to mean any terminating portion of the substrate. The examiner does not interpret "edge" as requiring "only" the end surface to be coated. Given this interpretation, claim 4 is met as set forth above for as the conductive polymer layer is disposed on the entire front (and back) surface of the media. Thus, they are on "edge" in the sense that they are formed on a terminating surface of the media.

10. The rejection of claim 1 under 35 U.S.C. 103(a) as being unpatentable over Yanai et al. in view of Murray et al. is withdrawn in view of the cancellation of the claim.

11. The rejection of claim 13 under 35 U.S.C. 103(a) as being unpatentable over Saitoh as modified by Murray above, and further in view of Ushigome (U55523153) is withdrawn in view of Applicant's amendments.

### ***Response to Arguments***

12. Applicant's arguments filed 5/23/05 have been fully considered but they are moot in view of the new grounds of rejection.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Holly Rickman whose telephone number is (571) 272-1514. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Holly Rickman  
Primary Examiner  
Art Unit 1773